**Eggcellent Eggsmosis Lab Report**

Introduction: To showcase the process of osmosis through a selectively permeable membrane in three different solutions.

Purpose:

* Osmosis – separation of water molecules through a selectively permeable membrane from high concentration to low concentration
* Selectively permeable membrane – membrane that only allows certain things to pass in and out depending on size
* Isotonic – amount of salt the same, thus allowing the flow of water in both directions
* Hypertonic – more salt outside the cell causing the water to exit and cell to shrink
* Hypotonic – less salt outside the cell causing the water to enter and cell to grow

Materials:

2 eggs, 2 plastic cups, spoon, paper towels, triple beam balance, vinegar, corn syrup, water, paper, pencil, 2 bowls/containers, jug for corn syrup

Results: Attached, pg. 42

Discussion: Eggs were placed in vinegar to dissolve the shell thus creating a selectively permeable membrane through which osmosis could occur. The control egg was left in vinegar solution, and did not lose or gain weight, whereby creating an isotonic solution, allowing water to flow in both directions having no effect on the egg. Another egg went from vinegar to corn syrup, and throughout this stay, the egg lost weight, whereby creating a hypertonic solution, allowing the water to exit and egg to shrink. This same egg was then placed in tap water and gained weight, whereby creating a hypotonic solution, allowing water to enter and egg to grow.